

PENDING CLAIMS  
Application No. 10/198,931  
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1. A composition comprising:

(i) at least one heteropolymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom;  
and

(ii) fibers,

(iii) at least one compound chosen from at least one polysaccharide resin and at least one copolymer film former chosen from di-block, tri-block, multi-block, and radial copolymers,

wherein said at least one heteropolymer is present in an amount effective to disperse said fibers.

2. The composition according to claim 1, wherein said at least one heteropolymer further comprises at least one of:

at least one terminal fatty chain chosen from alkyl chains and alkenyl chains,  
wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

at least one pendant fatty chain chosen from alkyl chains and alkenyl chains,  
wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.

3. The composition according to claim 2, wherein said alkyl chains and said alkenyl chains each comprise at least four carbon atoms.

4. The composition according to claim 2, wherein said at least one linking group is chosen from single bonds and urea, urethane, thiourea, thiourethane, thioether, thioester, ester, ether and amine groups.

5. The composition according to claim 4, wherein said at least one linking group is an ester group present in a proportion ranging from 15% to 40% of the total number of all ester and hetero atom groups in the at least one heteropolymer.

6. The composition according to claim 2, wherein said at least one terminal fatty chain is functionalized.

7. The composition according to claim 2, wherein said at least one pendant fatty chain is functionalized.

8. The composition according to claim 1, wherein said at least one heteropolymer has a weight-average molecular mass of less than 100,000.

9. The composition according to claim 1, wherein said at least one hydrocarbon based repeating unit comprises from 2 to 80 carbon atoms.

10. The composition according to claim 1, wherein said at least one hydrocarbon based repeating unit is chosen from saturated and unsaturated hydrocarbon-based units which are chosen from linear hydrocarbon-based repeating units, branched hydrocarbon-based repeating units and cyclic hydrocarbon-based repeating units.

11. The composition according to claim 1, wherein said at least one hetero atom of said at least one hydrocarbon-based repeating unit is chosen from nitrogen, sulphur, and phosphorus.

12. The composition according to claim 11, wherein said at least one hetero atom is a nitrogen atom.

13. The composition according to claim 12, wherein said at least one hetero atom is combined with at least one atom chosen from oxygen and carbon to form a hetero atom group.

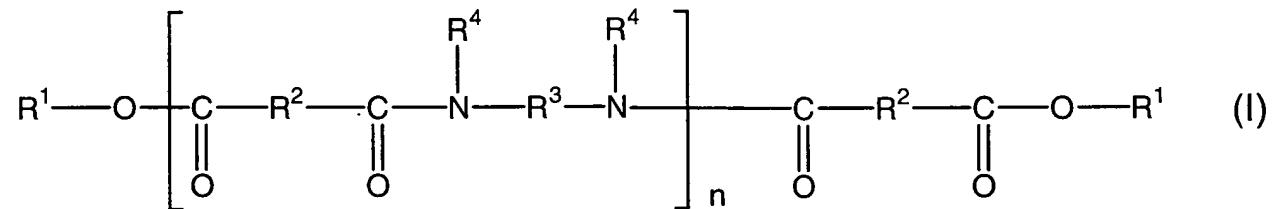
14. The composition according to claim 13, wherein said at least one hetero atom group further comprises a carbonyl group.

15. The composition according to claim 13, wherein said at least one hetero atom group is chosen from amide groups, carbamate groups, and urea groups.

16. The composition according to claim 15, wherein said at least one hetero atom group is an amide group and said polymer skeleton is a polyamide skeleton.

17. The composition according to claim 15, wherein said at least one hetero atom group is chosen from carbamate groups and urea groups and said polymer skeleton is chosen from a polyurethane skeleton, a polyurea skeleton and a polyurethane-polyurea skeleton.

18. The composition according to claim 1, wherein said at least one heteropolymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;

- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of all R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;
- R<sup>3</sup>, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R<sup>3</sup> comprises at least 2 carbon atoms; and
- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R<sup>3</sup> and another R<sup>4</sup> such that when said at least one group is chosen from another R<sup>4</sup>, the nitrogen atom to which both R<sup>3</sup> and R<sup>4</sup> are bonded forms part of a heterocyclic structure defined in part by R<sup>4</sup>-N-R<sup>3</sup>, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen atoms.

19. The composition according to claim 18, wherein in said formula (I), n is an integer ranging from 1 to 5.

20. The composition according to claim 1, further comprising at least one liquid fatty phase.

21. The composition according to claim 20, wherein said at least one liquid fatty phase of the composition comprises at least one oil.

22. The composition according to claim 21, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil.

23. The composition according to claim 22, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon

atoms, said chains optionally being chosen from linear and branched, and saturated and unsaturated chains;

- synthetic oils or esters of formula  $R_5COOR_6$  in which  $R_5$  is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and  $R_5 + R_6 \geq 10$ ;
- synthetic ethers comprising from 10 to 40 carbon atoms;
- C<sub>8</sub> to C<sub>26</sub> fatty alcohols; and
- C<sub>8</sub> to C<sub>26</sub> fatty acids.

24. The composition according to claim 22, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;
- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each comprising from 2 to 24 carbon atoms;
- phenylsilicones; and
- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

25. The composition according to claim 20, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

26. The composition according to claim 25, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

27. The composition according to claim 26, wherein said at least one liquid fatty phase is present in an amount ranging from 1% to 99% by weight relative to the total weight of the composition.

28. The composition according to claim 20, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

29. The composition according to claim 1, wherein said fibers are chosen from natural and synthetic fibers.

30. The composition according to claim 29, wherein said natural fibers are chosen from cotton, silk, wool, and other keratin fibers.

31. The composition according to claim 29, wherein said synthetic fibers are chosen from polyester, rayon, nylon and other polyamide fibers.

32. The composition according to claim 28, wherein said fibers have an average length ranging from 0.5 mm to 4.0 mm.

33. The composition according to claim 32, wherein said fibers have an average length ranging from 1.5 mm to 2.5 mm.

34. The composition according to claim 1, wherein said fibers are present in the composition in an amount ranging from 0.5% to 10% relative to the total weight of the composition.

35. The composition according to claim 1, further comprising at least one film former different from said at least one polysaccharide resin.

36. The composition according to claim 1, wherein the composition is in a form chosen from a fluid gel, rigid gel, fluid simple emulsion, rigid simple emulsion, fluid multiple emulsion, and rigid multiple emulsion.

37. A composition comprising:

(i) at least one heteropolymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom;  
and

- (ii) fibers,
- (iii) at least one polysaccharide resin, and
- (iv) at least one copolymer film former chosen from di-block, tri-block, multi-block, and radial copolymers,

wherein said at least one heteropolymer is present in an amount effective to disperse said fibers.

38. A method for dispersing fibers in a cosmetic composition which comprises fibers comprising

including in said cosmetic composition:

- (i) at least one heteropolymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom

in an amount effective to disperse said fibers.

39. The method according to claim 38, wherein said at least one heteropolymer further comprises at least one of:

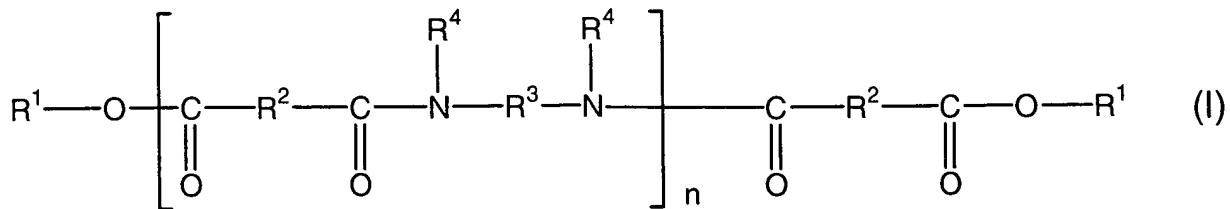
at least one terminal fatty chain chosen from alkyl chains and alkenyl chains,

wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

at least one pendant fatty chain chosen from alkyl chains and alkenyl chains,

wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.

40. The method according to claim 39, wherein said at least one heteropolymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R<sup>1</sup>, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R<sup>2</sup>, which are identical or different, are each chosen from C<sub>4</sub> to C<sub>42</sub> hydrocarbon-based groups with the proviso that at least 50% of all R<sup>2</sup> are chosen from C<sub>30</sub> to C<sub>42</sub> hydrocarbon-based groups;
- R<sup>3</sup>, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R<sup>3</sup> comprises at least 2 carbon atoms; and
- R<sup>4</sup>, which are identical or different, are each chosen from hydrogen atoms, C<sub>1</sub> to C<sub>10</sub> alkyl groups and a direct bond to at least one group chosen from R<sup>3</sup> and another R<sup>4</sup> such that when said at least one group is chosen from another R<sup>4</sup>, the nitrogen atom to which both R<sup>3</sup> and R<sup>4</sup> are bonded forms part of a heterocyclic structure defined in part by R<sup>4</sup>-N-R<sup>3</sup>, with the proviso that at least 50% of all R<sup>4</sup> are chosen from hydrogen atoms.

41. The method according to claim 38, wherein said cosmetic composition further comprises at least one liquid fatty phase.

42. The method according to claim 38, wherein said cosmetic composition further comprises at least one compound chosen from at least one polysaccharide resin and at least one copolymer film former chosen from di-block, tri-block, multi-block, and radial copolymers.